Claims

1. (Original) In a computer system, a method of representing video data for a video image, the method comprising:

representing chroma and luma information for a pixel in the video image in an n-bit representation, the n-bit representation comprising a 16-bit fixed-point block of data for the pixel, where the most significant byte in the 16-bit unit of data is an integer component, where the least significant byte in the 16-bit unit of data is a fractional component, and where the n-bit representation is convertible to a lower-precision representation by assigning zero values to one or more of the bits in the least significant byte.

2. (Original) The method of claim 1 wherein the n-bit representation is a 16-bit representation and the lower-precision representation is a 10-bit representation.

3. (Original) The method of claim 1 further comprising converting the n-bit representation to an (n-m)-bit representation by assigning zero values to the m least-significant bits in the least-significant byte.

4. (Original) The method of claim 1 wherein the chroma information is sampled at a resolution less than the luma information.

5. (Original) A computer-readable medium having computer-executable instructions stored thereon for performing the method of claim 1.

6. (Original) In a computer system, a method of representing video data for a video image, the method comprising:

representing chroma and luma information for a pixel in the video image in an n-bit representation, the n-bit representation comprising a 16-bit fixed-point block of data for the pixel, where the most significant byte in the 16-bit unit of data is an integer component, where the least significant byte in the 16-bit unit of data is a fractional component, and where the n-bit

representation is convertible to a higher-precision representation by changing an identifier for the video data.

7. (Original) The method of claim 6 wherein the identifier is a FOURCC code.

8. (Original) The method of claim 6 wherein the n-bit representation is a 10-bit representation and the higher-precision representation is a 16-bit representation.

9. (Original) The method of claim 6 wherein the chroma information is sampled at a resolution less than the luma information.

10. (Original) A computer-readable medium having computer-executable instructions stored thereon for performing the method of claim 1.

11.-34. (Canceled)

35. (New) The method of claim 3 wherein the n-bit representation is a 16-bit representation, and wherein the (n-m)-bit representation is a 10-bit representation.

36. (New) The method of claim 3 further comprising processing data in the (n-m)-bit representation using (n-m)-bit hardware.

37. (New) The method of claim 36 wherein the (n-m)-bit hardware comprises a 10-bit processor.

38. (New) The method of claim 3 wherein the n-bit representation and the (n-m)-bit representation are associated with different FOURCC codes.

39. (New) The method of claim 1 wherein one or more alpha values are associated with the video image.

40. (New) A computer system comprising:

at least one memory containing chroma and luma information for at least one pixel in a video image, the chroma and luma information in an n-bit representation, the n-bit representation comprising a 16-bit fixed-point block of data for the pixel, where the most significant byte in the 16-bit unit of data is an integer component, where the least significant byte in the 16-bit unit of data is a fractional component, and where the n-bit representation is convertible to a lower-precision representation by assigning zero values to one or more of the bits in the least significant byte; and

one or more processing units operable to process the chroma and luma information for the at least one pixel in the video image.

41. (New) The computer system of claim 40 wherein the n-bit representation is a 16-bit representation and the lower-precision representation is a 10-bit representation.

42. (New) The computer system of claim 41 wherein at least one of the one or more processing units is a 10-bit processing unit, and wherein the 16-bit representation is converted to a 10-bit representation by assigning zero values to 6 least-significant bits in a least-significant byte.

43. (New) The computer system of claim 40 wherein at least one of the one or more processing units an x-bit processing unit, where x is equal to the number of bits in the lower-precision representation.

44. (New) The computer system of claim 40 wherein the n-bit representation and the lower-precision representation are represented by different FOURCC codes.

45. (New) The computer system of claim 40 wherein the at least one memory further contains one or more alpha values associated with the video image.

46. (New) The computer system of claim 40 further comprising a display.